



MOOI MGENI TRANSFER SCHEME PHASE 2 (MMTS-2) Construction of the Spring Grove Dam Wall

[DEA Reference Number: 12/12/20/220]



MONTHLY ECO REPORT : October – November 2011



ENVIRONMENTAL AND SOCIAL CONSULTANTS

P.O. BOX 1673
SUNNINGHILL
2157

Offices 4 & 5
23 Jan Hofmeyer Road
Westville
3629

Tel : 031 266 3884
Fax : 031 266 5287
Email: info@nemai.co.za

TITLE AND APPROVAL PAGE

Project name: **Mooi Mgeni Transfer Scheme Phase 2 - Construction of the Spring Grove Dam Wall**

Report Title: **Monthly Environmental Control Officer Report**

Authors: **N Naidoo, R. Le Roux, D Henning**

DEA reference no.: **12/12/20/220**

Status of report: **Revision 01**

Compliance Report No: **08**

Date of issue: **22 November 2011**

PSP: Nemaï Consulting

Approved for PSP by:

N Naidoo
Project Manager

TCTA: Client

Approved for TCTA by:

K Govender
Environmental Manager

TABLE OF CONTENTS

TITLE AND APPROVAL PAGE	I
TABLE OF CONTENTS	II
LIST OF ACRONYMS & ABBREVIATIONS	IV
DEFINITIONS	V
1 INTRODUCTION	1
2 ECO MONITORING APPROACH	2
2.1 Weekly Monitoring	2
2.2 Monthly Monitoring	2
3 CONSTRUCTION ACTIVITIES FOR THE MONITORING PERIOD	4
4 ENVIRONMENTAL ACTIVITIES FOR THE MONITORING PERIOD	7
5 WATER, AIR AND NOISE MONITORING	10
5.1 Air Quality	11
5.1.1 Dust Fallout	11
5.1.2 Continuous Particulate Monitoring (PM10) with Wind Speed and Direction	11
5.2 Environmental Noise	11
5.3 Water Quality	12
6 ENVIRONMENTAL PERFORMANCE	13
6.1 Weekly ECO Monitoring – Status of Issues	13
6.1.1 27 October 2011	13
6.1.2 03 November 2011	14
6.1.3 10 November 2011	15
6.1.4 17 November 2011	17
6.1.5 Conclusions	20
6.2 Monthly ECO Monitoring Checklist	21
6.2.1 Monitoring Categories	21
6.2.2 Areas of Non-Compliance	21

6.2.3	Overall Monitoring Results	23
6.2.4	Sequential ECO Monitoring Results	24
7	NON-CONFORMANCE / INCIDENT REPORTING	24
8	ISSUES AND COMPLAINTS	26
9	PROPOSED AMENDMENTS TO THE ROD AND EMP	31
9.1	Proposed Amendments to RoD	31
9.2	Proposed Amendments to EMP	31

LIST OF TABLES

TABLE 1:	SUMMARY OF MONTHLY ECO MONITORING CHECKLIST CATEGORIES: OCT – NOV 2011	21
TABLE 2:	SELECTED AREAS OF NON-COMPLIANCE: OCT – NOV 2011	22
TABLE 3:	SUMMARY OF RESULTS OF MONTHLY ECO MONITORING CHECKLIST: OCT – NOV 2011	23
TABLE 4:	ENVIRONMENTAL NON-CONFORMANCE / INCIDENT REGISTER: OCT - NOV 2011	25
TABLE 5:	ISSUES AND COMPLAINTS REGISTER: OCT – NOV 2011	27
TABLE 6:	PROPOSED AMENDMENTS / MATTERS FOR CLARIFICATION RELATED TO THE ROD	31
TABLE 7:	PROPOSED AMENDMENTS / MATTERS FOR CLARIFICATION RELATED TO THE EMP	32

LIST OF FIGURES

FIGURE 1:	ENVIRONMENTAL GOVERNANCE ARRANGEMENTS: LINES OF ACCOUNTABILITY	1
FIGURE 2:	CONSTRUCTION OF EARTH EMBANKMENT	5
FIGURE 3:	CONSTRUCTION OF CONDUIT AND OUTLET WORKS	5
FIGURE 4:	CONSTRUCTION OF THE RIVER DIVERSION	5
FIGURE 5:	BURYING OF PLANT MATERIAL	5
FIGURE 6:	SIGNAGE FOR STORAGE OF HAZARDOUS MATERIAL AT CRUSHER AREA	7
FIGURE 7:	DUST ABATEMENT ON OVERDALE ROAD	8
FIGURE 8:	FIRE DANGER INDEX SIGNAGE ERECTED ADJACENT TO THE SITE ENTRANCE	8
FIGURE 9:	DESIGNATED AREA FOR STORAGE OF HAZARDOUS MATERIAL	9
FIGURE 10:	SERVICING OF VEHICLE IN DESIGNATED AREA	9
FIGURE 11:	CLEAN-UP OF SPILLAGE	10
FIGURE 12:	SILTATION OF THE RIVER	22
FIGURE 13:	LEAKING CHEMICAL TOILET	23
FIGURE 14:	GRAPH - SUMMARY OF RESULTS OF MONTHLY ECO MONITORING CHECKLISTS	24

LIST OF ACRONYMS & ABBREVIATIONS

DEA	Department of Environmental Affairs
ECO	Environmental Control Officer
EO	Environmental Officer
EMP	Environmental Management Plan
EM	Environmental Monitor
EMC	Environmental Monitoring Committee
MMTS-2	Mooi Mgeni Transfer Scheme Phase 2
TCTA	Trans-Caledon Tunnel Authority
RoD	Record of Decision

DEFINITIONS

Auditing

An 'environmental' audit is a methodical examination (including tests, checks, and confirmation) of environmental procedures and practices with the view of verifying whether they comply with internal policies, accepted practices and legal requirements

Environment

The surroundings in which humans exist and which comprise:

- The land, water and atmosphere of the earth.
- Micro-organisms, plant and animal life.
- Any part or combination of a) and b) and the interrelationships among and between them.
- The physical, chemical, aesthetic and cultural properties and conditions of the foregoing that can influence human health and well-being.

Environmental Aspect

Those components of the company's activities, products and services that are likely to interact with the environment.

Record of Decision

The written statement from the relevant environmental authority in terms of the Environment Conservation Act (Act 73 of 1989), with or without conditions, that records its approval of a planned activity and the implementation thereof and the mitigating measures required to prevent or reduce the effects of environmental impacts during the life of a contract.

Environmental Feature

Elements and attributes of the biophysical, economic and social environment.

Environmental Impact

The change to the environment resulting from an environmental aspect (an activity) on the environment, whether desirable or undesirable. An impact may be the direct or indirect consequence of an activity.

Environmental Management Plan (EMP)

A detailed plan of action prepared to ensure that recommendations for enhancing positive impacts and/or limiting or preventing negative environmental impacts are implemented during the life-cycle of a project.

Environmental Objective

Overall environmental goal pertaining to the management of environmental features.

Environmental Target

Performance requirement that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.

Hazardous Waste

Any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment

Monitoring

'Compliance' monitoring is a continuous and systematic process to ensure that the conditions in the Record of Decision (RoD) Environmental Management Plan (EMP) are being adhered to.

Pollution

Any change in the environment caused by substances, radioactive or other waves, or noise, odours, dust or heat, emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future.

1 INTRODUCTION

Nemai Consulting was appointed as the independent Environmental Control Officer (ECO) for the Trans-Caledon Tunnel Authority (TCTA) for the Mooi-Mgeni Transfer Scheme Phase 2 (MMTS-2) project.

The ECO’s functions in terms of environmental compliance monitoring are to systematically monitor the processes and activities required for the implementation of the Environmental Management Plan (EMP) and the conditions in the Record of Decision (RoD) (refer to environmental governance arrangements in **Figure 1**).

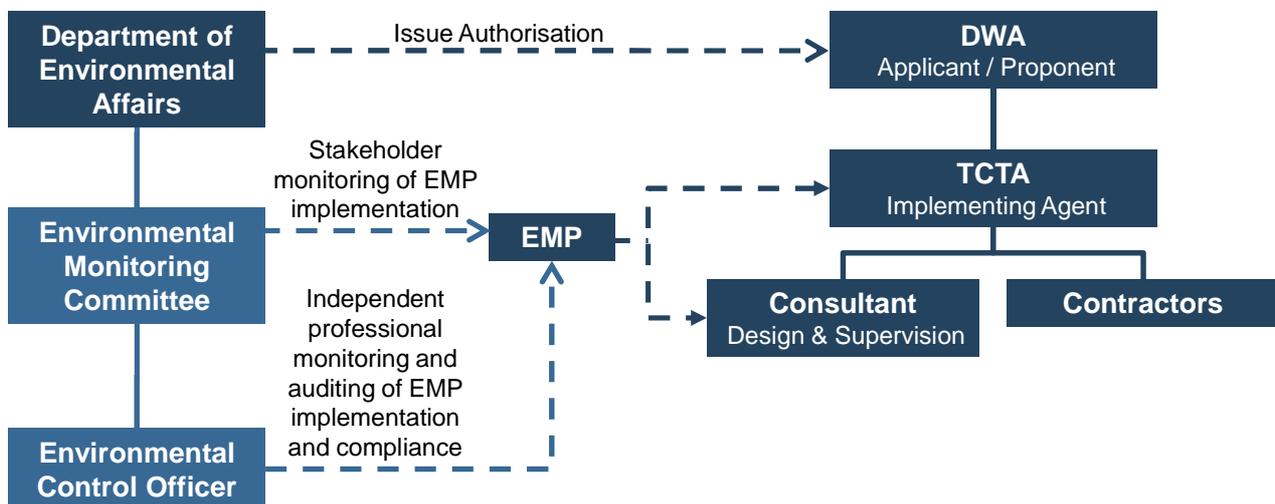


Figure 1: Environmental Governance Arrangements: Lines of Accountability

To date, the following EMPs have been approved by the Department of Environmental Affairs (DEA):

- EMP for the Construction of the Spring Grove Dam Wall – approved on 03 May 2011;
- EMP for Traffic Related Activities – approved on 16 August 2011; and
- EMP for Search, Rescue and Relocation – approved on 07 September 2011.

This document serves as the monthly ECO Report for October to November 2011. The monitoring event was undertaken on 17 November 2011.

2 ECO MONITORING APPROACH

2.1 Weekly Monitoring

Weekly ECO monitoring sessions are carried out once a week where a full day is spent onsite to inspect the overall construction site. The weekly ECO monitoring reports, which are submitted to TCTA, serve as an overview of the following:

- New or improved areas of good environmental practices and compliance;
- Areas of poor practices or where concerns have been noted;
- Status of previous issues; and
- Conclusions.

The weekly ECO monitoring events are more focused on best environmental practices, rather than regulatory compliance.

2.2 Monthly Monitoring

Monthly ECO monitoring serves to check compliance against the following:

- Conditions of the RoD for the construction of the Spring Grove Dam Wall; and
- EMPs and associated conditions of approval.

The Monthly ECO monitoring reports are submitted to TCTA, the Environmental Monitoring Committee (EMC), and ultimately DEA. The monthly ECO monitoring includes once a month full day site inspections, checking environmental administrative provisions (e.g. documentation, files, registers), analysing monitoring data, checking complaints, interviewing the Environmental Manager, Environmental Monitor (EM) and Environmental Officer (EO) (as required) and completing a detailed ECO Monitoring Checklist.

The ECO Monitoring Checklist consists of monitoring items extracted from the EMP and RoD, and are categorised as follows:

- Environmental Authorisation;
- Administration;
- Environmental Education and Awareness;
- Construction;

- Materials;
- Water Quality;
- Air Quality;
- Noise;
- Community Engagement;
- Archaeology and Cultural Sites;
- Vegetation;
- Fauna;
- Traffic;
- Safety and Security;
- Waste; and
- Rehabilitation

The following Conformance Scores, based on the level of compliance for the overall site, is allocated to each monitoring item in the checklist (overleaf):

CONFORMANCE SCORES	DESCRIPTION
1	Task not achieved
2	Task 20% complete
3	Task 50% complete
4	Task 80 % complete
5	Task 100% completed in accordance with the EMP

Where non-conformance to the RoD conditions and EMP mitigation measures is encountered (i.e. COMFORMANCE SCORE < 5), the significance of the associated Impact is recorded based on the following guidelines):

IMPACT SCORES	IMPACT
1	Low – mitigation not needed/ mitigation measures to be maintained
2	Medium – mitigation should be considered
3	High – mitigation compulsory

The identified non-conformances and related impacts are also rated based on the following **Penalty Scores**:

PENALTY SCORES	DESCRIPTION
0	Not Applicable / Impact or Non-Conformance occurred in area of low Environmental Significance
1	Moderate – Impact/Non-Conformance occurred in area of moderate Environmental Significance (<i>1% Deduction from total conformance score</i>)
2	High – Impact/Non-Conformance occurred in area of high Environmental Significance (<i>3% Deduction from total conformance score</i>)
3	Very High – Impact/Non-Conformance Occurred in area of very high Environmental Significance (<i>5% Deduction from total conformance score</i>)

The overall compliance score is based on:

- No of items scored for the monitoring event;
- The highest conformance score for the monitoring event;
- The actual conformance score for the monitoring event;
- The conformance percentage for the monitoring event (%);
- Total Penalty Deductions (%); and
- Total Conformance Score Including Penalty Deductions (%).

3 CONSTRUCTION ACTIVITIES FOR THE MONITORING PERIOD

Amongst others, the following main construction activities took place during the monthly monitoring period, as identified during the monitoring sessions and from the EO's daily site diary:

1. Excavation of dam foundation on left and right bank of the river (on-going);
2. Construction of the earth embankment (on-going) (**Figure 2**);
3. Building of conduit and outlet works (on-going) (**Figure 3**);
4. Building of river diversion (on-going) (**Figure 4**);
5. Operations at batch plant (on-going);
6. Operations at crusher area (on-going);
7. Construction of the concrete trial mix area (on-going);
8. Upgrade of D146 (on-going); and
9. Excavation for burying of plant material generated from site clearing activities (**Figure 5**).



Figure 2: Construction of earth embankment



Figure 4: Construction of the river diversion



Figure 3: Construction of conduit and outlet works



Figure 5: Burying of plant material

The following areas were inspected during the monitoring session:

- Site offices;
- Stores area;
- Permanent bunded area;
- Workshop;
- Temporary bunded area;
- Waste transition area;
- Heritage areas;
- Batch plant area;
- Laboratory area;
- Eating area;
- Crusher area;
- The three streams on site;
- Dam basin;
- Concrete trial mix area
- Temporary river crossing;
- River diversion; and
- Spoil sites.

* **COMMENTS:**

TCTA	
------	--

4 ENVIRONMENTAL ACTIVITIES FOR THE MONITORING PERIOD

Some of the **key environmental activities** on site, which also include areas of good practices and compliance, were as follows:

- Designated area built for storage of hazardous material;
- Servicing of vehicle in designated area;
- Use of drip trays for machinery and equipment;
- Water truck undertaking dust suppression on site and on Overdale Road;
- Mobile toilets provided at work area;
- Signage provided on the D146 Road at the area where culverts are being installed;
- Use of personal protection equipment;
- Signage erected at the crusher area at container for storage of hazardous material;
- Environmental team removing weeds on site;
- Fire Danger Index signage erected adjacent to the site entrance.
- Hay bales installed at the river diversion area.
- Toolbox talks held include –
 - Dewatering Practices - 20 October 2011;
 - Spills and Spills Removal - 02 November 2011; and
 - Spillages - 08 November 2011.



Figure 6: Signage for storage of hazardous material at crusher area



Figure 7: Dust abatement on Overdale Road



Figure 8: Fire Danger Index signage erected adjacent to the site entrance



Figure 9: Designated area for storage of hazardous material



Figure 10: Servicing of vehicle in designated area



Figure 11: Clean-up of spillage

* COMMENTS:
TCTA

5 WATER, AIR AND NOISE MONITORING

Amongst others, the functions of the ECO include the following:

- Conduct third-party monitoring and auditing;
- Regularly monitor and review the progress towards achieving the specific strategies, objectives and performance targets of the EMP; and
- Review monitoring data and evaluate against performance targets.

The Contractor has appointed Blue Sands to conduct monthly water, air and noise monitoring. Comments on these reports for September 2011, as received on 01 November 2011, follow below.

It is noted that the raw data is received by the ECO as soon as it becomes available to ensure prompt feedback.

5.1 Air Quality

5.1.1 Dust Fallout

- Monitoring stations are similar to the baseline studies, and appear to adequately consider the proximity to source, community receptors and terrain. The DF10 sampling location was added in response to the spoil area expanding and the necessity to monitor dust in this location, due to the increased activity.
- Dust fallout rates remain well within the residential band. This is supported by the observation that there are few visible signs of dust fallout on surrounding vegetation and other horizontal surfaces.

5.1.2 Continuous Particulate Monitoring (PM₁₀) with Wind Speed and Direction

- A number of exceedences of the daily limit for PM₁₀ were recorded, and were ascribed to mist. According to Blue Sands, there is photographic evidence of this occurrence and the raw data also shows that during these exceedences the wind speed is zero. These exceedences occurred during the early hours of the morning when there was no activity on site. A heated inlet has now been installed to avoid a recurrence of this problem.
- Examination of the raw data shows that the PM₁₀ concentrations outside of misty morning periods are typically below the daily limit of 120µg/m³.
- Based on the entries in the Issues Register, as maintained by the Social Monitor, no complaints regarding dust was received on the above days where thresholds were exceeded.

5.2 Environmental Noise

- On 15 September 2011 the sound levels recorded at EN01 and EN02 were above the limit values for “suburban districts with little road traffic” and “urban districts with main roads” respectively, with the main contributing source being construction activities on the Spring Grove dam site. Other sound level limit exceedences on this date were attributed mainly to traffic and wind.
- Similarly on 30 September 2011 high values attributed to on site construction activities were measured at EN02. Other sound level limit exceedences on this date were attributed mainly to traffic on the R103.

- Based on the entries in the Issues Register, as maintained by the Social Monitor, no complaints regarding noise was received on the above days where thresholds were exceeded.

5.3 Water Quality

- For the samples taken on 16 September 2011 all variables at all locations, were below the thresholds.
- In the samples taken on 30 September 2011 only the Zinc concentration values at WQ01 and WQ02 were slightly elevated above threshold values. These sampling sites are both located upstream of the construction site and the elevated levels can thus not be attributed to construction-related activities.

*

COMMENTS:

TCTA	
------	--

6 ENVIRONMENTAL PERFORMANCE

An overview of the environmental performance during the monthly monitoring period is provided in the sub-sections to follow.

6.1 Weekly ECO Monitoring – Status of Issues

6.1.1 27 October 2011

STATUS OF PREVIOUS ISSUES

Issue Ref.	Category	Summary of poor practice / area of concern	Status
017	Pollution	1. Inadequate storage of hazardous materials at the workshop area; the batch plant area and at the dam foundation offices.	1. NCR issued on 05/09/2011. Storage of hazardous materials has improved: Fynn and James are using a stainless steel bund which is housed in a ventilated storage area provided with fire-fighting equipment and signage. X
059	Water Conservation	1. Leaking water pipe at the water abstraction point.	1. Leaking water pipe to be attended to. EM suggested deadline: 03 November 2011. X
061	Pollution	1. Spillage observed under the excavator at the crusher area.	1. Spillage removed on 18 October 2011. New spillage observed under the excavator at the crusher area was removed on 20 October 2011. ✓
		2. Wastewater management at the batching plant.	2. Mitigation measures currently underway with the installation of the drainage (to be completed week 31 October – 04 November 2011) to the separator/recycling area. X
063	Housekeeping	1. Poor housekeeping observed at the lab area.	1. Poor housekeeping to be improved. EM suggested deadline: 03 November 2011. X
064	Pollution	1. Inadequate storage of hazardous materials at the lab area and the workshop area.	1. NCR issued on 05/09/2011. EM suggested deadline: 03 November 2011. X
		2. Cement spills from cement mixing observed at the workshop area. Mixing to be undertaken on plastic lining or impermeable surface to prevent pollution.	2. Cement spills removed on 21 October 2011. ✓
065	Waste	1. Waste separation at the waste transition area. Cardboard observed in the general waste designated area.	1. Waste separation attended to on 27 October 2011. ✓

NEW ISSUES (i.e. areas of poor practice / areas for improvement / areas of concern)

Issue Ref.	Category	Observations	Improvements Required / Objectives to be achieved
066	Pollution	1. Concrete runoff at the batch plant. 2. Concrete spill observed at the river diversion area. 3. Vehicle maintenance being undertaken outside the designated maintenance area at the workshop area.	1. Concrete runoff at the batch plant to be addressed. EM suggested deadline: 03 November 2011. 2. Concrete spill observed at the river diversion area to be removed. EM suggested deadline: 03 November 2011.

Issue Ref.	Category	Observations	Improvements Required / Objectives to be achieved
		4. Drip tray with no spill cap observed at the river diversion area.	3. Vehicle maintenance to be undertaken within the designated maintenance area. EM suggested deadline: 03 November 2011. 4. Drip tray to be provided with spill cap to prevent contamination. EM suggested deadline: 03 November 2011.
067	Litter	1. Litter observed at the second RCC trial mixing area.	1. Litter observed at the second RCC trial mixing area. EM suggested deadline: 03 November 2011.

6.1.2 03 November 2011

STATUS OF PREVIOUS ISSUES

Issue Ref.	Category	Summary of poor practice / area of concern	Status	
017	Pollution	1. Inadequate storage of hazardous materials at the workshop area; the batch plant area and at the dam foundation offices.	1. NCR issued on 05/09/2011. Storage of hazardous materials has improved: Fynn and James are using a stainless steel bund which is housed in a ventilated storage area provided with fire-fighting equipment and signage During the last monitoring event inadequate storage of hazardous materials was observed at the batch plants area and the river diversion storage area. EM suggested deadline for adequate storage of hazardous materials: 10 November 2011.	X
059	Water Conservation	1. Leaking water pipe at the water abstraction point.	1. Leaking water pipe at the water abstraction point to be attended to. EO to provide mitigation measures. EM suggested deadline: 10 November 2011.	X
061	Pollution	1. Spillage observed under the excavator at the crusher area.	1. Spillage removed on 18 October 2011. New spillage observed under the excavator at the crusher area removed on 20 October 2011. Spillage observed under the excavator at the crusher area on 03 November 2011 to be removed. EM suggested deadline: 10 November 2011.	X
		2. Wastewater management at the batching plant.	2. The installation of the drainage to the separator/recycling area was completed on 28 October 2011.	✓
063	Housekeeping	1. Poor housekeeping observed at the lab area.	1. Poor housekeeping attended to.	✓
064	Pollution	1. Inadequate storage of hazardous materials at the lab area.	1. Adequate storage of material at the lab area: provision of drip tray; fire-fighting equipment and signage observed on 03 November 2011.	✓
066	Pollution	1. Concrete runoff at the batch plant.	1. Concrete runoff at the batch plant has been stockpiled and will be removed from site week 07 – 13 November 2011.	✓
		2. Concrete spill observed at the river diversion area.	2. Concrete spill observed at the river diversion area removed on 01 November 2011. New concrete spills observed at the river diversion area to be removed. EM suggested deadline: 10 November 2011.	X
		3. Vehicle maintenance being undertaken outside the designated maintenance area at the workshop area.	3. Vehicle maintenance is now being undertaken within the designated maintenance area.	✓

Issue Ref.	Category	Summary of poor practice / area of concern	Status
		4. Drip tray with no spill cap observed at the river diversion area.	4. During the last monitoring event, it was observed that all drip trays were provided with spill caps. ✓
067	Litter	1. Litter observed at the second RCC trial mixing area	2. Litter removed on 01 November 2011. ✓

NEW ISSUES (i.e. areas of poor practice / areas for improvement / areas of concern)

Issue Ref.	Category	Observations	Improvements Required / Objectives to be achieved
068	Siltation	1. Silt laden water observed at the river diversion area.	1. Mitigation measures to prevent silt laden water entering the river to be implemented. EM suggested deadline: 10 November 2011.
069	Pollution	1. No drip tray provided for the compressor at the earth embankment. 2. Oil rags observed on the ground at the workshop area. 3. Grease spillages observed at the workshop area. 4. No spill prevention measures provided for greasing of pipes. 5. Spillage observed under the crusher at the crusher area.	1. Drip tray to be provided for equipment on site. EM suggested deadline: 10 November 2011. 2. Oil rags observed on the ground at the workshop area to be removed. EM suggested deadline: 10 November 2011. 3. Grease spillages observed at the workshop area to be removed. EM suggested deadline: 10 November 2011. 4. Spill prevention measures for greasing of pipes to be implemented. EM suggested deadline: 10 November 2011. 5. Spillage observed under the crusher at the crusher area to be removed. EM suggested deadline: 10 November 2011.
070	Litter	1. Litter observed at the river diversion areas and at the lab area.	1. Litter observed at the river diversion areas and at the lab area to be removed. EM suggested deadline: 10 November 2011.

6.1.3 10 November 2011

STATUS OF PREVIOUS ISSUES

Issue Ref.	Category	Summary of poor practice / area of concern	Status
017	Pollution	1. Inadequate storage of hazardous materials at the workshop area; the batch plant area and at the dam foundation offices.	1. NCR issued on 05/09/2011. Storage of hazardous materials has improved: Fynn and James are using a stainless steel bund which is housed in a ventilated storage area provided with fire-fighting equipment and signage. During the last monitoring event no inadequate storage of hazardous materials was observed at the batch plants area. However inadequate storage of hazardous materials was observed at the river diversion storage area. EM new suggested deadline for adequate storage of hazardous materials: 17 November 2011. X
059	Water Conservation	1. Leaking water pipe at the water abstraction point.	1. Leaking water pipe at the water abstraction point to be attended to. EO to provide mitigation measures. EM suggested deadline for feedback from contractor: 17 November 2011. X

Issue Ref.	Category	Summary of poor practice / area of concern	Status	
061	Pollution	1. Spillage observed under the excavator at the crusher area.	1. Spillage observed under the excavator at the crusher area has been removed on 18 October 2011. New spillage observed under the excavator at the crusher area has been removed on 20 October 2011. Spillage observed under the excavator at the crusher area on 03 November 2011 to be removed. Spillage observed at the excavator at the crusher area has been removed on 09 November 2011. New spillages observed under the excavator at the crusher area to be removed. EM suggested deadline: 17 November 2011.	X
		2. Wastewater management at the batching plant.	2. The installation of the drainage to the separator/recycling area was completed on 28 October 2011. During the last monitoring event concrete wash was observed at the batch plant area. Concrete wash management to be undertaken. EM suggested deadline: 17 November 2011.	X
066	Pollution	1. Concrete runoff at the batch plant.	1. Concrete runoff at the batch plant has been stockpiled and will be removed from site week 07 – 13 November 2011. During the last monitoring event it was observed that the concrete runoff has not been removed. New timeframe for concrete removal: week 14 – 21 November 2011.	X
		2. Concrete spill observed at the river diversion area.	2. Concrete spill removed on 01 November 2011. New concrete spills observed at the river diversion area to be removed. EM suggested deadline: 10 November 2011. New concrete spills observed during the last monitoring event. EM suggested deadline: 17 November 2011.	X
067	Siltation	1. Silt laden water observed at the river diversion area.	1. Mitigation measures to prevent silt laden water entering the river to be implemented. EM suggested deadline: 10 November 2011. During the last monitoring event no silt laden was observed entering the river.	X
068	Pollution	1. No drip tray provided for the compressor at the earth embankment.	1. Drip tray to be provided for equipment on site. EM suggested deadline: 10 November 2011. During the last monitoring event generator at the river diversion area offices was not provided with a drip tray. EM suggested deadline: 17 November 2011.	X
		2. Oil rags observed on the ground at the workshop area.	2. Oil rags removed on 07 November 2011.	✓
		3. Grease spillages observed at the workshop area.	3. Grease spillages removed on 07 November 2011.	✓
		4. No spill prevention measures provided for greasing of pipes.	4. Spill prevention measures to be implemented. EM suggested deadline: 10 November 2011. During the last monitoring event no greasing of pipes was undertaken on site.	X
		5. Spillage observed under the crusher at the crusher area.	5. Spillage to be removed. EM suggested deadline: 10 November 2011. During the last monitoring it was observed that the spillage has not been removed. EM new suggested deadline: 17 November 2011.	X
069	Litter	1. Litter observed at the river diversion area and the lab area.	1. Litter to be removed. EM suggested deadline: 10 November 2011. Litter observed at the river diversion area and at the lab area has been	X

Issue Ref.	Category	Summary of poor practice / area of concern	Status
			removed on 07 November 2011. During the last monitoring event litter was again observed at the river diversion area. EM suggested deadline: 17 November 2011.

NEW ISSUES (i.e. areas of poor practice / areas for improvement / areas of concern)

Issue Ref.	Category	Observations	Improvements Required / Objectives to be achieved
071	Pollution	<ol style="list-style-type: none"> 1. Spillages observed at the river diversion area. 2. Spillages observed at the workshop area. 3. Spillages observed under the generator at the water abstraction point. 4. Spillage observed at the RCC area. 5. Oil rags observed at the river diversion area. 6. Shutter oil container placed directly on the ground at the river diversion area. 7. No spill tray observed under the equipment at the workshop area. 	<ol style="list-style-type: none"> 1. Spillages to be removed. EM suggested deadline: 17 November 2011. 2. Spillages to be removed. EM suggested deadline: 17 November 2011. 3. Spillages to be removed, EM suggested deadline: 17 November 2011. 4. Spillage to be removed. EM suggested deadline: 17 November 2011. 5. Oil rags to be removed. EM suggested deadline: 17 November 2011. 6. Shutter oil container to be placed on drip tray. 7. Spill tray to be provided for equipment at the workshop area. EM suggested deadline: 17 November 2011.
072	Housekeeping	<ol style="list-style-type: none"> 1. Poor housekeeping at the river diversion area. 2. Housekeeping required at the diesel bowser storage within the workshop area. 	<ol style="list-style-type: none"> 1. Housekeeping to be improved. EM suggested deadline: 17 November 2011. 2. Housekeeping to be addressed. EM suggested deadline: 17 November 2011.
073	Waste Separation	<ol style="list-style-type: none"> 1. Waste separation at the lab area and waste transition area. 	<ol style="list-style-type: none"> 1. Waste separation to be addressed. EM suggested deadline: 17 November 2011.

6.1.4 17 November 2011

STATUS OF PREVIOUS ISSUES

Issue Ref.	Category	Summary of poor practice / area of concern	Status
017	Pollution	<ol style="list-style-type: none"> 1. Inadequate storage of hazardous materials at the workshop area; the batch plant area and at the dam foundation offices. 	<ol style="list-style-type: none"> 1. NCR issued on 05/09/2011. Storage of hazardous materials has improved: Fynn and James are using a stainless steel bund which is housed in a ventilated storage area provided with fire-fighting equipment and signage During the last monitoring event no inadequate storage of hazardous materials was observed at the batch plants area. However inadequate storage of hazardous materials was observed at the river diversion storage area. EM new suggested deadline for adequate storage of hazardous materials: 17 November 2011. During the last monitoring event it was observed that inadequate storage of material is still taking place at the river diversion area. EM new suggested deadline for adequate storage of hazardous materials: 24 November 2011.
059	Water Conservation	<ol style="list-style-type: none"> 1. Leaking water pipe at the water abstraction point. 	<ol style="list-style-type: none"> 1. Leaking water pipe at the water abstraction point to be attended to. EO to provide mitigation

Issue Ref.	Category	Summary of poor practice / area of concern	Status
			measures. EM suggested deadline for feedback from contractor: 17 November 2011. Feedback not yet received. EM new suggested deadline for feedback from contractor: 21 November 2011.
061	Pollution	1. Spillage observed under the excavator at the crusher area.	1. Spillage observed under the excavator at the crusher area has been removed on 18 October 2011. New spillage observed under the excavator at the crusher area has been removed on 20 October 2011. Spillage observed under the excavator at the crusher area on 03 November 2011 to be removed. Spillage observed at the excavator at the crusher area has been removed on 09 November 2011. New spillages observed under the excavator at the crusher area to be removed. EM suggested deadline: 17 November 2011. Spillages previously observed at the crusher area have been removed on 15 November 2011. New spillage observed at the crusher area on 17 November 2011 to be removed. EM suggested deadline: 24 November 2011.
		2. Wastewater management at the batching plant.	2. The installation of the drainage to the separator/recycling area completed on 28 October 2011. On 10 November 2011 concrete wash was observed at the batch plant area. Concrete wash management undertaken on 16 November 2011.
066	Pollution	1. Concrete runoff at the batch plant.	1. Concrete runoff removed from site on 15 November 2011.
		2. Concrete spill observed at the river diversion area.	2. Concrete spill removed on 01 November 2011. New concrete spills observed at the river diversion area to be removed. EM suggested deadline: 10 November 2011. New concrete spills observed during the last monitoring event. EM suggested deadline: 17 November 2011. Some of the concrete spills have been removed on 14 November 2011. The remaining concrete spills to be removed. EM suggested deadline: 24 November 2011.
067	Siltation	1. Silt laden water observed at the river diversion area.	1. Mitigation measures to prevent silt laden water entering the river to be implemented. EM suggested deadline: 10 November 2011. During the last monitoring event no silt laden was observed entering the river. NCR issued on 16 November 2011 due to mitigation measures to prevent silt laden water not being implemented. 17/10/2011 silt laden water was observed entering the river. On 17 November 2011 silt laden water observed entering the river. EM suggested deadline for mitigation measures implementation: 25 November 2011.
068	Pollution	1. No drip tray provided for the compressor at the earth embankment.	1. Drip tray to be provided for equipment on site. EM suggested deadline: 10 November 2011. On 10 November 2011 generator at the river diversion area offices was not provided with a drip tray. EM suggested deadline: 17 November 2011. During the last monitoring event it was observed that no drip tray was provided for compressor at the earth embankment. EM suggested deadline: 24 November 2011.
069	Litter	1. Litter observed at the river diversion	1. Litter to be removed. EM suggested deadline: 10

Issue Ref.	Category	Summary of poor practice / area of concern	Status
		area and the lab area.	November 2011. Litter observed at the river diversion area and at the lab area has been removed on 07 November 2011. On 10 November 2011 litter was again observed at the river diversion area. EM suggested deadline: 17 November 2011. During the last monitoring event it was observed that litter management has improved.
070	Pollution	1. Spillages observed at the river diversion area.	1. Spillages to be removed. EM suggested deadline: 17 November 2011. Spillages previously observed at the river diversion area were removed on 11 November 2011.
2. Spillages observed at the workshop area.		2. Spillages observed at the workshop area to be removed. EM suggested deadline: 17 November 2011. Some spillages removed on 14 November 2011; additional spillages to be removed. EM suggested deadline: 18 November 2011.	
3. Spillages observed under the generator at the water abstraction point.		3. Spillages to be removed, EM suggested deadline: 17 November 2011. During the last monitoring event it was observed that spillages under the generator at the water abstraction point were not removed. EM new suggested deadline for spillages removal: 18 November 2011.	
4. Spillage observed at the RCC area.		4. Spillage to be removed. EM suggested deadline: 17 November 2011. Spillage removed 11 November 2011.	
5. Oil rags observed at the river diversion area.		5. Oil rags observed at the river diversion area to be removed. EM suggested deadline: 17 November 2011. Oil rags removed 14 November 2011.	
6. Shutter oil container placed directly on the ground at the river diversion area.		6. Shutter oil container removed on 11 November 2011.	
7. No spill tray observed under the equipment at the workshop area.		7. During the last monitoring event no equipment without a drip tray was observed at the workshop area.	
071	Housekeeping	1. Poor housekeeping at the river diversion area.	1. Housekeeping at the river diversion area has been undertaken on 15 and 16 November 2011. During the last monitoring event it was observed that housekeeping at the river diversion area and adjacent to the waste transition area needs to be addressed.
2. Housekeeping required at the diesel bowser storage within the workshop area.		2. Housekeeping to be addressed. EM suggested deadline: 17 November 2011. During the last monitoring event it was observed that housekeeping was not addressed. EM new suggested deadline: 22 November 2011.	
072	Waste Separation	1. Waste separation at the lab area and waste transition area.	1. Waste separation to be addressed. EM suggested deadline: 17 November 2011. During the last monitoring event it was observed that the scrap metal designated bin at the lab area was used for plastic. EM suggested deadline: 24 November 2011.

NEW ISSUES (i.e. areas of poor practice / areas for improvement / areas of concern)

Issue Ref.	Category	Observations	Improvements Required / Objectives to be achieved
074	Pollution	<ol style="list-style-type: none"> 1. Vehicle maintenance not being undertaken within the designated area at the workshop area. 2. Spillages observed at the workshop area. 3. No spill tray provided under the vehicle during maintenance undertaken at the workshop area. 4. Cigarette stubs observed near the storage of hazardous materials at the crusher site. 5. Oil rag observed in the storage container at the crusher site. 6. Hazardous substances container placed directly on the ground at the river diversion area. 7. Grease container placed directly on the ground at the earth embankment area. 8. Leaking toilet adjacent to the waste transition area. 	<ol style="list-style-type: none"> 1. Vehicle maintenance to be undertaken within the designated area. EM suggested deadline: 24 November 2011. 2. Spillages observed at the workshop area to be removed. EM suggested deadline: 24 November 2011. 3. Spill tray to be provided during maintenance. EM suggested deadline: 24 November 2011. 4. Cigarette stubs observed near the storage of hazardous materials at the crusher site to be removed. EM suggested deadline: 24 November 2011. 5. Oil rag observed in the storage container at the crusher site to be removed. EM suggested deadline: 24 November 2011. 6. Hazardous substances containers to be provided with drip trays. EM suggested deadline: 24 November 2011. 7. Grease container to be provided with drip trays. EM suggested deadline: 24 November 2011. 8. Leaking toilet adjacent to the waste transition area to be fixed. EM suggested deadline: 24 November 2011.
075	Sensitive environmental feature	<ol style="list-style-type: none"> 1. The location of the excavation for the burial of vegetation removed from site is inadequate, as this area is a wetland which is a sensitive environmental feature. 	<ol style="list-style-type: none"> 1. Consultation with the environmental team on site should have been undertaken in order to identify a suitable area for burial of the vegetation removed from the site.
076	Housekeeping	<ol style="list-style-type: none"> 1. Housekeeping at the workshop area. 	<ol style="list-style-type: none"> 1. Housekeeping to be addressed. EM suggested deadline: 24 November 2011.
077	Waste Separation	<ol style="list-style-type: none"> 1. Waste separation at the waste transition area. 	<ol style="list-style-type: none"> 1. Waste separation to be addressed. EM suggested deadline: 24 November 2011.

6.1.5 Conclusions

Spillages, waste separation, storage and handling of hazardous material, and housekeeping were identified as on-going problems that need to be attended to.

Spillages observed were removed and certificates of safe disposal were received from the waste service provider. Continual improvements for storage of hazardous materials were also observed.

* **COMMENTS:**

TCTA	
------	--

6.2 Monthly ECO Monitoring Checklist

Note that compliance against the EMP for the Search, Rescue and Relocation (approved on 07 September 2011) was not scored during the monthly monitoring event. The current works area does not encroach on possible sites for occurrence of protected species and a site walkabout for current works area was conducted prior to construction activities. The specialists for the search and rescue will be mobilised by TCTA in due course.

The results of the monthly ECO Monitoring Checklist are summarised in the sub-sections to follow.

6.2.1 Monitoring Categories

The results of the monitoring categories are summarised below.

Table 1: Summary of Monthly ECO Monitoring Checklist categories: Oct – Nov 2011

Monitoring Category	Conformance Score (%)
Environmental Authorisation	96.28
Administration	100.00
Environmental Education and Awareness	100.00
Construction	100.00
Materials	94.51
Water Quality	90.67
Air Quality	95.00
Noise	100.00
Community Engagement	100.00
Archaeology and Cultural Sites	100.00
Vegetation	100.00
Fauna	100.00
Safety & Security	100.00
Waste	96.00
Traffic	99.13

6.2.2 Areas of Non-Compliance

Selected areas of significant non-compliance for October – November 2011, which (amongst others) influenced the conformance and penalty scores contained in **Table 1**, are captured in the table to follow.

Table 2: Selected areas of non-compliance: Oct – Nov 2011

Condition / Mitigation Measure	Comments
Undertake dust abatement measures such as the wetting of construction areas and the application of chemical palliatives on heavily used unpaved roads and the re-vegetation of permanent stockpiles	Dust abatement measures include regular watering of haul roads and D146. Various complaints received regarding excessive dust. Monitoring shows dust fallout levels are within standards.
Provisions of the National Water Act, 1998 (Act 36 of 1998). Silting, demarcation and management of material storage and vehicle servicing areas used by the contractor to be outside of the 1:50 year flood line or at least 100 meters from any watercourses	Siltation of the river at the dam wall construction area from dewatering (see Figure 12).
Liquid effluent generated through the construction process must be disposed of in a manner approved by the relevant local municipality and compliant to the relevant legislation	Liquid waste disposal certificate available. Leaking chemical toilet encountered on site at workshop area (see Figure 13).
Uncontrolled releases of hazardous materials to be prevented	Various spillages observed. Diesel rag found in container. Suitable clean-up required.
Smoking is prohibited in fire hazard areas (i.e. workshops, fuel storage areas)	Sigarette butts at entrance to container where hazardous material is kept. Signage provided.
Silt laden water shall not be directly discharged over land or directly into watercourses and shall be contained in settlement ponds and managed before release	Water pumped from excavation at the watercourse crossing on the D146 (off R103) over land. Siltation at dam wall construction site.
All delivery trucks travelling on the N3, R102 and D146 must be properly covered	Complaint received on 03 Nov 11 that a truck was transporting an uncovered load.



Figure 12: Siltation of the river



Figure 13: Leaking chemical toilet

6.2.3 Overall Monitoring Results

The summary of the results of the ECO monitoring checklist follows.

Table 3: Summary of results of Monthly ECO Monitoring Checklist: Oct – Nov 2011

Description	Total	Percentage
Number of Items Scored for this Audit	170	
Highest Possible Conformance Score for the monitoring period	850	100
Actual Conformance Score	818	96.24

6.2.4 Sequential ECO Monitoring Results

A graph indicating the sequential ECO Monitoring Results from May 2011 until present follows.

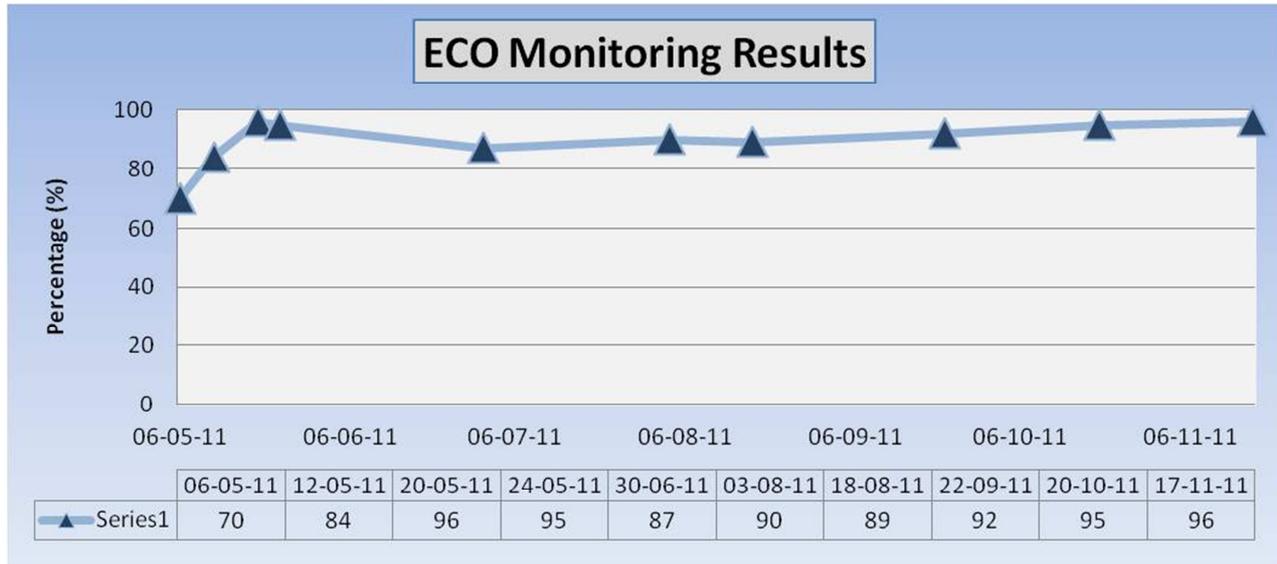


Figure 14: Graph - summary of results of Monthly ECO Monitoring Checklists

There was an improvement in the compliance score achieved from September 2011 to present.

*** COMMENTS:**

TCTA

7 NON-CONFORMANCE / INCIDENT REPORTING

The following environmental non-conformances / incidents were recorded by the EM during the monthly ECO monitoring period.

Table 4: Environmental Non-Conformance / Incident Register: Oct - Nov 2011

Date of NCR / Incident	Description	Suggested Corrective Action	Actual Corrective Action	EM Suggested Deadline	Actual Date Corrected	Closed-Out
16/11/2011	Silt laden water was observed entering the river from dewatering practices at the dam foundation area. On the 15/11/2011 this activity was stopped by the RE; and suitable measures were asked to be put in place before the activity resumed. Upon inspection by the EM on the 16/11/2011 the measures in place were observed to be inadequate, resulting in sedimentation of the river. This issue is also on the EM's action register from the 09/11/2011 for action.	The contractor must take cognisance of section P67 4.3.6 (a) and (b) and to ensure that adequate measures are in place when undertaking dewatering practices.		12/11/2011		No

The non-conformance of 16 November 2011 is to be attended to through improved mitigation.

*

COMMENTS:

TCTA

8 ISSUES AND COMPLAINTS

Table 5 contains the issues and complaints (16 entries) that were recorded by the Social Monitor during the monthly ECO monitoring period.

In terms of the target set in the EMP for Issues and Complaints Management, all complaints must be responded to within 10 working days. Based on the entries in the register, this target has been met.

The following issues and complaints are unresolved, based on the register:

- Issue no. 74 – feedback required regarding RTI traffic monitoring and policing;
- Issue no. 75 – road verges to be rehabilitated and rocks to be removed;
- Issue no. 76 – feedback required from TCTA on compensation/redundancy packages to farm workers;
- Issue no. 86 – feedback required from TCTA on relocation; and
- Issue no. 89 – feedback on felling of trees.

For issues no. 88, on-going monitoring of noise levels from batching plant to detect whether thresholds are being exceeded.

The remaining issues have been adequately attended to.

Table 5: Issues and Complaints Register: Oct – Nov 2011

No	Date	Submitted by	Description of Issue	Response to Issue	Resolved & Communicated	Date Resolved
74	24-Oct-11	Peter Greene, on behalf of Sharon Southgate	<p>Issue: e-mail sent to Peter Green from Sharon Southgate: Dear Mr Greene, I would like to comment on the trucks using the R103 for deliveries to the dam. The trucks that I have seen are doing the right things, sticking to the speed limit of 40km/h etc. but the other road users are totally irrational in their driving. They overtake on solid white lines, where there are blind rises and weave in and out constantly to check whether there is oncoming traffic even when it clearly states that there is no possibility of overtaking. I travel from Mooi River to Nottingham Road and back daily and in the last month have not seen any kind of traffic monitoring or trapping. Perhaps they only do it at certain times of the day, but it should be monitored closer to the times when the trucks are passing through. There will be a serious accident in the near future if small vehicle drivers don't start been more patient. Yours sincerely, Mrs Sharon Southgate. 1) Follow-up One: Hi David, Can we have this tabled at the meeting. I sent out a memo to members with regard to the proposed extended transporting hours after our last meeting. I have had a number of objections to this – some of the concern being the lack of ability of the RTI to supply enforcement during regular hours never mind the additional times proposed which would require an additional shift by RTI. There is also a feeling that what has been agreed to was done through a consultative process and any substantive change to the EMP should go out for public comment. Considering the above I do not believe that I nor other community representatives are mandated to vote in favour of a substantive change to the EMP without a process of consultation in this regard. Peter Greene 2) Follow-up Two: The Chairman EMC, recent feedback from the RTI refers. Feedback from local residents is that there is currently no policing taking place on the R103 and as a result other road users are overtaking dangerously along this route. The lack of policing is supported by recent RTI statistics and I will be surprised if we achieve 20% enforcement over the current month. The justification that there are sporting events to take care of is surely unacceptable. These events are planned in advance and should be policed by reservists. Mr Coucourakis clearly stated at our EMC meeting of 4 April 2011 that officers would report daily in two shifts. These officers would be dedicated to the R103 with the exception of when there is an accident on the R103. There have been a number of accidents on the R103 but surely this hasn't taken up 80% of their time. I would urge that the EMC take steps to have the RTI increase their enforcement on the R103 and stick to what they had originally undertaken to do for the duration of construction. Peter Greene</p>	<p>Reply to Peter from Katie: Thanks Peter, This behaviour is scary. I look forward to reading your comments, and will prepare a report to TCTA/BKS/Group Five re the issue. I'd imagine that Blake should be one of the first people to read it, and that it should be brought up at next week's EMC as an urgent matter. Do you want to get in contact with Dave Cook re placing it on an agenda, or would you like me to? Katie. 1) Response One: Dear Peter, Thanks for the email. I have expressed much the same view as yours in an email to Blake. It will almost certainly come up at the EMC meeting on the 2nd Nov when the October law enforcement return is presented. Regards, David. 2) Response Two: Dear Peter, Yes – it will come up at the meeting since it has been formally registered as a complaint. The question of how the extra delivery cycle, as contemplated, will be negotiated and taken forward will also form part of that discussion. I am hoping that RTI will be able to field the requisite staff to not only police the existing traffic load but also any additional volume. Regards, David.</p>	No	

No	Date	Submitted by	Description of Issue	Response to Issue	Resolved & Communicated	Date Resolved
75	27-Oct-11	Peter Warren	Peter called to ask whether the road upgrade has been finished, and if so whether his verge is going to be left in the state that it is currently in. While he understands that the verge is road reserve he has always kept the grass on the verge short, and mown it during summer. He can no longer do this because there are rocks in the way. He's worried about his safety. He has many evening commitments and often arrives home late; if the grass is allowed to get long, because he won't be able to mow, he is sure that people will hide in it. Either the stones must be moved so that he can mow, or The Contractor must keep the grass short.	The road upgrade is not complete, and the verges need to be rehabilitated, which involves laying top soil and re-grassing. BKS will issue an instruction to The Contractor re this, and make sure that the post road upgrade rehabilitation work is done. Gavin Elliott replied: Ryan, it would be appreciated if you could see that this particular section of the verge gets attention as soon as possible, in particular the removal of the rocks and replacing the top soil.	N (Katie to keep Peter Warren up-to-date re solution)	
76	27-Oct-11	Hugh Ahrens	Tandazi Farm: Hi Katie, further to our recent telecon I write to enquire as to what progress has been made in finalizing the matter of compensation/redundancy packages which are recommended for payment to staff members who will become unemployed when our property is taken over as the result of the Springgrove Dam construction. The matter is now becoming urgent with only just over four months to the hand over date, during which time we must get agreement with the staff member (fortunately only one in our case), who I am sure has his own ideas of what he should be getting - and you can be sure that there are many rumours being spread in this regard. I would be grateful if you could stress the urgency of this to your superiors and look forward to a response sooner rather than later. Regards, Hugh Ahrens	Hi Hugh, Thank you so much for sending me this query. I've logged it as Issue 76 in our register, and it has been forwarded to the TCTA expropriation team. They are obliged to respond to the issue logged, and I will follow-up with them tomorrow. I understand the urgency of an answer, especially in your case. Kind regards, Katie. Response from Tente: For issues like this they must write directly to TCTA and only if TCTA does not respond then they can raise a complaint about TCTA failure to respond to their queries.	No	
77	28-Oct-11	Various Overdale and D146 Residents	Friday 28 October 2011 was a pay-weekend Friday. The site knocked off at midday, but the aggregate trucks continued to deliver aggregate until the late afternoon. It was a particularly dry and dusty day, one that would have benefited from the water trucks being in operation. It is the feeling of residents that the dust clouds are not acceptable and that if the aggregate trucks run the roads must be watered, regardless of it being a pay weekend.	Initially Peter Fynn and James Mbongwa said that they had not been instructed to work on Friday afternoon and the following Monday 31st. Andrew Olden responded that the trucks had been instructed to continue the watering but that one truck had broken and the other was site-based. It has been agreed that when the aggregate trucks run on the D146 the dust mitigation measures will also be in place.	Yes	01-Nov-11
78	01-Nov-11	Alan Venables	Hi Katie, Please accept this belated thank you for sending a small team to mend the "apron of access" from my driveway to Overdale Road. I was at home when the team arrived so was able to let them have some builders sand , water and a gum pole stomper so that a very strong result was achieved. Now for the moan – or should that be a query? Coming from the N3 towards Nottingham Road at about 15.15 hours yesterday afternoon I was very surprised when but one but TWO Trans Africa Freight HGVs appeared out of the mist coming towards me from Nottingham Road. Was there an accident between Rosetta and Mooi River on the R103 or were the two drivers involved ignoring the instruction to return to PMB via Mooi River? Obviously I was unable to read the Registration Numbers but it should be a relatively simple matter to find out which trucks let the construction site at about 15.00 hours to be able to identify the culprits. Please keep me posted as to your enquiries. Best regards, Alan Venables	Response from Jay Sookoo from Trans Africa Freight: Our drivers have been issued with Zemele Toll cards. On the 31st the cards did not work when it was swiped at the Toll. The drivers paid cash for the first trip and then decided not to use the toll because they thought that the card would not work again. We had meanwhile contacted Zemele Tolls and they were back on line within 10 minutes of the card not working. Our drivers are fined R200 if they do not use the toll and we have reprimanded them that this should not happen again. The drivers are warned that they should call us immediately should the card not work at the toll and we can call Zemele to sort out the problem.	Yes	02-Nov-11

No	Date	Submitted by	Description of Issue	Response to Issue	Resolved & Communicated	Date Resolved
79	02-Nov-11	Carolyn Zelenka	Received via sms: Hi Katie, a lorry has just this moment sped past our property much too fast! There seems to be a total disregard as to the speed limit by some of the drivers. What can be done about it? There doesn't seem to be a police presence on either the R103 or the D146, which may not help?! Carolyn Z. Subsequent telephone conversation: Particular yellow lorry that bombs along the D146, but on the whole trucks are good. But a couple of rogue trucks are spoiling it for the rest.	Response from Ryan Phelan: he was behind this truck, it did gear down and speed up in order to pass a stationary crane that was on the D146 right outside the Zelenka's property. There should be no overtaking on the Overdale/D146 roads but this truck did need to pass the stationary object.	Yes	02-Nov-11
80	03-Nov-11	John Wetton	Received via sms: Hi Katie, I know that the water trucks are operating but could we please have them more often. The windy and dry conditions make it very unpleasant. Speeding is still an issue, the big yellow trucks seem to be going pretty fast! Thanks, John.	The water trucks are doing as many trips as they can manage at the moment. The yellow trucks that you see are working on the D146 culvert and are trying to finish it as fast as possible, but are speeding; they have been warned.	Yes	03-Nov-11
81	03-Nov-11	Kogi Govender	Kogi reported that Vermeulen Sands, NJ54142, was travelling along the P147/R103 with an uncovered load.	Query from David to Paul: At about 8h30 Katie Fenenga reported to me a complaint from the community one of our vehicle with a trailer registration NJ54142 Truck number NJ 58684 SGDK712 travelling on P147 to Nottingham Road (trailer was not covered with toppling). It is true, the driver arrived on site at Spring Grove Dam at 8h50 without cover loaded with 19mm Stones . The driver failed to follow the standard safe procedure laid down .Your assistance and speedily response will be appreciated. Please send to me a proof what kind of warning /disciplinary action was given or taken. Response from Paul to David: Hi David, This was a new trailer and the driver had forgotten to transfer to the tarp to the new trailer. It has been rectified.	Yes	03-Nov-11
82	03-Nov-11	Various Overdale and D146 Residents	Dust coming off the roads and the site is unacceptable.	The water trucks are doing as many trips as they can manage at the moment. Sandhisha says that non-toxic chemical soil binders/soil stabilizers have been introduced into the water used for dust abatement and that further measures will have to be looked into.	Yes	03-Nov-11
83	03-Nov-11	Nigel Rossouw, Sandhisha Jay Narain	A man was jumping over the construction domain fence between Derek Greene's property and the site. He walked over the dedicated site access road and went to the river to collect water. There are often trucks, bakkies and other vehicles driving along that road and the site is strictly out of bounds. There is signage up to this effect.	Response e-mail from Katie to Sandhisha: Hi Sandhisha, Thank you for communicating the encounter/sighting to me. I called Derek who gave me the following explanation: the man collecting water was a contractor, hired for the day to fix a fence and gate on top of the hill above that portion of the access road. Derek says it's entirely his fault and that he forgot to remind the contractor that the fenced-off area and river are out-of-bounds. In future he will alert fence fixers/other contract workers to this situation.	Yes	03-Nov-11
84	04-Nov-11	Various residents, in particular Peter Warren.	Dust coming off the roads and the site is unacceptable. It is a very windy day, but he has not seen a water-truck all morning	James Mbongwa said that one truck had swallowed a stone and that the mechanic was fixing it; another truck was on site but would not be available until after 12h00. Both Ryan and Sandhisha follow-up and a truck was sent out immediately.	Yes	04-Nov-11

No	Date	Submitted by	Description of Issue	Response to Issue	Resolved & Communicated	Date Resolved
85	05-Nov-11	John Zelenka	Received sms on Saturday evening: Hi Katie, sorry to moan at this time but they've chopped my phone line again. They were doing the drainage & ripped the line out. Pls contact Telkom. My number is 033 267 7959	Response to John on Saturday night via sms: Hi John, apparently fault logging on your number is already in progress so I can't get another reference number. Please let me know how repairs go. Response from Ryan on Monday 7 Nov 2011: none of the guys working on that drainage pipe had equipment that would have been tall enough to damage a telephone line; they all swear to know nothing about the damaged line. Response from John Z: Telkom came to repair his line; they told him that someone had broken it/torn it down and then when fixing it had connected the wrong cables together and in so doing had short circuited the whole system.	Yes	07-Nov-11
86	07-Nov-11	Ida Majola	Ida called with the following problem: she doesn't know what is going on. She says that everyone else, all her neighbours, are leaving on the 1st of December. The McKenzies and Winckworths are leaving in April 2012. The she will be all alone at the bottom of the hill. Her problem is that she needs to apply by the end of November to a new school for her children, so she needs to know where she is going. One day of not working means one day of not feeding her family; so what will she do when she has to take time off work to find somewhere to live, and what will she do when she has to move? She wants something in her hand during this time. Note: this is not the first time she's been in contact with questions; but it is the first time she's mentioned that she would need to be compensated for working days lost due to the relocation.	Katie responded: It is very unlikely that you will be moving anywhere at the beginning of next year; we still have to find the best plan for you and that will take a little bit longer. Please try not to worry about the issue of school application; we will arrange your move so that you have time to apply.	No	
87	09-Nov-11	Various	Complaint from a number of D146 and Overdale residents re the dust coming off both site and the roads. They've asked for water trucks to water more often.	Ryan and Sandhisha both followed-up with Dumisani and Fynn-James. Katie sent an e-mail to James Mbongwa from Fynn-James. The water trucks immediately began more intensive watering.	Yes	09-Nov-11
88	09-Nov-11	John Zelenka	Phone call at 17h15; John asked about the noise coming from the batch plant. He wanted to know whether it was the kind of noise that could be expected in future.	Ulrich explained that the noise will actually intensify; the most noise is made by the aggregate being poured into the plant, and lessens when water is added to the mix. The addition of aggregate lasts about ten minutes, and the mixing takes about five minutes. There will not be much night work this year, but when the RCC mixing and pouring takes place there will be about three months of 24 hr work.	Yes	10-Nov-11
89	10-Nov-11	Gavin Pote	There is a man, Mr Veenstra, felling vast numbers of trees on four properties in the Vaalekop area. Has the tree felling contract already been awarded? Who has instructed him to work on Bruce Edmund's property? He's working mainly below the expropriation line, but he's just about to cut down Bruce Edmund's maple trees that are above the line.	Ryan and Katie drove to Vaalekop to stop the tree felling until further communication between TCTA and the residents. TCTA has expropriated the four properties in question, and the trees on those properties belong to TCTA, to be used mainly for chipping and site rehabilitation.	No	

* **COMMENTS:**

TCTA



9 PROPOSED AMENDMENTS TO THE ROD AND EMP

9.1 Proposed Amendments to RoD

An application for an amendment to the Environmental Authorisation was submitted by DWA to DEA on 01 August 2011.

Proposed amendments or matters for clarification related to the RoD are contained in **Table 6**.

Table 6: Proposed amendments / matters for clarification related to the RoD

Condition No.	Description	Comments
3.2.1.22	Indigenous vegetation removed from the dam basin must be kept in a temporary nursery to be used for rehabilitation	Addressed in EMP for Search, Rescue and Relocation, which was approved on 07 September 2011.
3.2.1.23	The wood from exotic and/or invasive species removed from the dam basin must be made available to the local community free of charge	Decision pending from Contractor regarding the way forward for the disposal of the cleared vegetation. RoD condition may prove to be costly.
3.2.3.3	The ECO who will act on behalf of the EMC to undertake daily monitoring compliance with the conditions of the RoD, environmental legislation and EMPs	ECO was not appointed as a daily monitor. Daily monitoring is undertaken by the EO on behalf of the Contractor and by the EM on behalf of the Engineer. Application for an amendment to the Environmental Authorisation was submitted by DWA to DEA on 01 August 2011.

* **COMMENTS:**

TCTA

9.2 Proposed Amendments to EMP

In accordance with the RoD condition no. 3.2.4.4, EMPs will be regarded as dynamic documents and any changes to the EMPs must be submitted to DEA for acceptance, which is to be accompanied by recommendations of the EMC.

An EMP Amendments Register was submitted by TCTA to DEA on 21 September 2011, which records the proposed amendments to the EMP for management measures that are deemed to be ineffective or redundant. These amendments were discussed with the EMC on 03 August 2011.

Proposed amendments or matters for clarification related to the EMP are contained in **Table 7**.

Table 7: Proposed amendments / matters for clarification related to the EMP

No.	Description	Comments
Previously listed Mitigation Measures		
1.	EMPs to provide rehabilitation measures for areas to be disturbed during the construction phase [RoD condition no. 3.2.4.3(b)].	EMP for the Construction of the Spring Grove Dam Wall to make provision for rehabilitation of areas affected by construction work outside of dam basin (e.g. access roads).
2.	EMPs to include implementation measures aimed at controlling invasive plant species and weeds [RoD condition no. 3.2.4.3(f)].	Addressed in EMP Register.
3.	Cover vehicles transporting spoil, topsoil or other dust generating materials.	Addressed in EMP Register.
4.	Dust suppression measures must be implemented on dry weather days.	The spoil area opposite Erika Millican's property is considered a working area and will not be watered down for dust suppression. Instead, visual inspections will be undertaken and if dust is a nuisance the area will be watered down.
5.	For each waste type create a MSDS that is always available to accompany the waste.	Addressed in EMP Register.
6.	All waste containers designated for off site transport to be secured and labelled with the contents and associated hazards, be properly loaded and be accompanied by a shipping paper (i.e. manifest) describing the load and its associated hazards	Impractical for all waste containers. Suitable for hazardous waste.
7.	Transporters of hazardous materials to ensure that: vehicles transporting hazardous materials are registered for this purpose; clearly display in English the nature of materials being transported; what to do in the event of an emergency and an emergency telephone number (24 hour) of a responsible person who can provide advice in an emergency	Bulk fuel transporters comply with this measure. However, requirements are too onerous for sub-contractors (e.g. mechanics). EMP deviation to be discussed.
8.	The quantity of hazardous material used each month is to be documented	Requirement is more feasible in terms of fuel usage. Necessity of measure to be explored further in terms of other hazardous material used on site, such as material used for the maintenance of vehicles, material used at the laboratory, etc.
9.	Monitor the number of project related vehicles travelling off site per day	Trucks are being monitored through GPS tracking system. Monitoring of other construction-related vehicles is an onerous task, and the practicality thereof needs to be investigated further.

*** COMMENTS:**

TCTA